

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	80	substrate.clm. and pixel\$1.clm. and circuit\$1.clm. and transmissive.clm.	USPAT	OR	OFF	2006/08/12 16:50
L2	60	substrate.clm. and pixel\$1.clm. and circuit\$1.clm. and transmissive.clm.	US-PGPUB	OR	OFF	2006/08/12 16:49
L3	13	substrate.clm. and pixel\$1.clm. and circuit\$1.clm. and transmissive.clm. and drive.clm.	US-PGPUB	OR	OFF	2006/08/12 16:49
L4	18	substrate.clm. and pixel\$1.clm. and circuit\$1.clm. and transmissive.clm. and drive.clm.	USPAT	OR	OFF	2006/08/12 16:49
L5	1	substrate.clm. and pixel\$1.clm. and circuit\$1.clm. and transmissive.clm. and drive.clm. and modulator\$1.clm.	USPAT	OR	OFF	2006/08/12 16:49
L6	2	substrate.clm. and pixel\$1.clm. and circuit\$1.clm. and transmissive.clm. and drive.clm. and modulator\$1.clm.	US-PGPUB	OR	OFF	2006/08/12 16:49

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	166	349/42 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmissive	USPAT	OR	OFF	2006/08/12 16:19
L2	92	349/5,6,7,8.ccls. and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmissive	USPAT	OR	OFF	2006/08/12 16:13
L3	105	349/153,154,110,190.CCLS. and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmissive	USPAT	OR	OFF	2006/08/12 16:36
L4	48	349/153,154,110,190.CCLS. and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmissive	US-PGPUB	OR	OFF	2006/08/12 16:19
L5	7	349/42 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmissive	US-PGPUB	OR	OFF	2006/08/12 16:19
L6	1206	substrate and pixel\$1 and (driv\$4 or circuit\$4) and (transmi\$9 same modulator\$1)	USPAT	OR	OFF	2006/08/12 16:20
L7	1106	substrate and pixel\$1 and (driv\$4 or circuit\$4) and (transmi\$9 same modulator\$1)	US-PGPUB	OR	OFF	2006/08/12 16:20
L8	11	substrate and pixel\$1 and (driv\$4 or circuit\$4) and (transmi\$9 same modulator\$1)	EPO; JPO; DERWENT	OR	OFF	2006/08/12 16:20
L13	372	359/237,223,224,288,302,290,291,292,621,622.CCLS. and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmi\$6	USPAT	OR	OFF	2006/08/12 16:39
L15	121	359/237,223,224,288,302,290,291,292,621,622.CCLS. and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmissive	US-PGPUB	OR	OFF	2006/08/12 16:38
L16	38	359/237,223,224,288,302,290,291,292,621,622.CCLS. and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmi\$6 AND (movable with electrode\$1)	USPAT	OR	OFF	2006/08/12 16:45
L18	2	359/623 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmi\$6 AND (movable with electrode\$1)	USPAT	OR	OFF	2006/08/12 16:46
L19	3	257/347 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmi\$6 AND (movable with electrode\$1)	USPAT	OR	OFF	2006/08/12 16:45
L20	1	257/347 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmi\$6 AND (movable with electrode\$1)	US-PGPUB	OR	OFF	2006/08/12 16:46
L21	0	359/623 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmi\$6 AND (movable with electrode\$1)	US-PGPUB	OR	OFF	2006/08/12 16:46
L22	0	438/311 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmi\$6 AND (movable with electrode\$1)	US-PGPUB	OR	OFF	2006/08/12 16:46
L23	1	438/311 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmi\$6 AND (movable with electrode\$1)	USPAT	OR	OFF	2006/08/12 16:46
S1	1	("20040233503").PN.	US-PGPUB	OR	OFF	2005/11/30 14:45

## EAST Search History

S2	195	substrate and transmiss\$4 and pixel and circuit and transparent and light and (micro\$1electromechanical or MEMS)	USPAT	OR	OFF	2005/03/16 13:27
S3	40	"359"/\$.ccls. and substrate and transmiss\$4 and pixel and circuit and transparent and light and (micro\$1electromechanical or MEMS)	USPAT	OR	OFF	2005/03/16 15:14
S4	155	S2 not S3	USPAT	OR	OFF	2005/03/16 15:13
S5	353	Koichi.in. and Kimura	USPAT	OR	OFF	2005/03/16 15:14
S6	1	S5 and substrate and transmiss\$4 and pixel and circuit and transparent and light and (micro\$1electromechanical or MEMS)	USPAT	OR	OFF	2005/03/16 15:14
S7	72	"359"/\$.ccls. and substrate and transmiss\$4 and pixel and circuit and transparent and light and actuator\$4	USPAT	OR	OFF	2005/03/16 16:57
S8	34	"359"/\$.ccls. and substrate and transmiss\$4 and pixel and circuit and transparent and light and actuator\$4 and open\$4	USPAT	OR	OFF	2005/03/16 16:59
S9	306	substrate and transmiss\$4 and pixel and circuit and transparent and light and actuator\$4 and (open or aperture\$2)	USPAT	OR	OFF	2005/03/16 19:05
S10	72	"359"/\$.ccls. and substrate and transmiss\$4 and pixel and circuit and transparent and light and actuator\$4	USPAT	OR	OFF	2005/03/16 16:59
S11	250	S9 not S10	USPAT	OR	OFF	2005/03/16 16:59
S12	195	substrate and transmiss\$4 and pixel and circuit and transparent and light and (micro\$1electromechanical or MEMS)	USPAT	OR	OFF	2005/03/16 16:59
S13	146	S11 not S12	USPAT	OR	OFF	2005/03/16 17:00
S14	200	microlens.ti.	USPAT	OR	OFF	2005/03/16 18:20
S15	5	S14 and pixel\$2 and light and (spatial near light)	USPAT	OR	OFF	2005/03/16 18:22
S16	5	substrate and transmiss\$4 and pixel and circuit and transparent and light and actuator\$4 and (open or aperture\$2) and (SOI)	USPAT	OR	OFF	2005/03/16 19:08
S17	5	substrate and transmiss\$4 and pixel and circuit and transparent and light and actuator\$4 and (open or aperture\$2) and (SOI or (silicon\$1on\$1insulator))	USPAT	OR	OFF	2005/03/16 19:08
S18	4	substrate and transmiss\$4 and pixel and circuit and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator)	USPAT	OR	OFF	2005/03/16 19:12
S19	4	substrate and transmiss\$4 and pixel and circuit and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1	USPAT	OR	OFF	2005/03/16 19:19

## EAST Search History

S20	3	substrate and transmiss\$4 and (pixel near2 circuit\$1) and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1	USPAT	OR	OFF	2005/03/16 19:37
S21	11384	substrate and transmiss\$4 and pixel circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1	USPAT	OR	OFF	2005/03/16 19:38
S22	11384	substrate and transmiss\$4 and pixel circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1 and (actuator\$3)	USPAT	OR	OFF	2005/03/16 19:38
S23	4	substrate and transmiss\$4 and pixel and circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1 and (actuator\$3)	USPAT	OR	OFF	2005/05/03 11:49
S24	4	substrate and transmiss\$4 and pixel and circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1 and (actuator\$3 or MEMs)	USPAT	OR	OFF	2005/03/16 20:49
S25	0	359/237,222,223,322,290,291.ccls. and substrate and transmiss\$4 and pixel and circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1 and (actuator\$3 or MEMs)	USPAT	OR	OFF	2005/03/16 20:56
S26	0	359/237,222,223,322,290,291.ccls. and substrate and transmiss\$4 and pixel and circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1 and (actuator\$3 or MEMs)	US-PGPUB	OR	OFF	2005/03/16 20:49
S27	0	438/311.ccls. and substrate and transmiss\$4 and pixel and circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1 and (actuator\$3 or MEMs)	US-PGPUB	OR	OFF	2005/03/16 20:50
S28	0	257/347.ccls. and substrate and transmiss\$4 and pixel and circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1 and (actuator\$3 or MEMs)	US-PGPUB	OR	OFF	2005/03/16 20:50
S29	1388	sinclair.in.	USPAT	OR	OFF	2005/03/16 20:50
S30	11	sinclair.in. and MEMS	USPAT	OR	OFF	2005/03/16 20:50

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S31	0	359/223,224,288,302,621,622,623.ccls. and substrate and transmiss\$4 and pixel and circuit\$4 and transparent and light and actuator\$4 and (open or aperture\$2) and (silicon\$1on\$1insulator) and silicon and insulator\$1 and (actuator\$3 or MEMs)	USPAT	OR	OFF	2005/03/16 20:57
S33	23	(transparent with substrate) and (pixel near3 circuit\$1) and micro\$1mirror\$1	USPAT	OR	OFF	2005/11/30 20:59
S34	0	(transparent with substrate) and (pixel near3 circuit\$1) and micro\$1mirror\$1	EPO; JPO; DERWENT	OR	OFF	2005/11/30 14:47
S35	21	(transparent with substrate) and (circuit\$1 with transparent) and micro\$1mirror\$1	USPAT	OR	OFF	2005/11/30 18:58
S36	15	(transmissive near substrate) and (pixel with circuit\$1) and micro\$1mirror\$1	USPAT	OR	OFF	2005/11/30 21:00
S37	13	"359"/\$.ccls. and (transmissive near substrate) and (pixel with circuit\$1) and micro	USPAT	OR	OFF	2005/12/01 20:36
S38	19	"359"/\$.ccls. and (transmissive near substrate) and (pixel with circuit\$1) and micro	US-PGPUB	OR	OFF	2005/12/01 18:58
S39	19	"359"/\$.ccls. and (transmissive near substrate) and (pixel with circuit\$1) and micro and circuit\$1	US-PGPUB	OR	OFF	2005/12/01 18:59
S40	43	"359"/\$.ccls. and (transparent near2 substrate) and (pixel and circuit\$1) and micro\$1mirror\$1	USPAT	OR	OFF	2005/12/01 21:14
S41	1	("5,166,766").PN.	USPAT	OR	OFF	2005/12/01 21:14
S42	1	("6377233").PN.	USPAT	OR	OFF	2006/08/09 20:33
S43	0	transmissive near8 modulator\$1	USPAT	OR	OFF	2006/08/09 20:33
S44	688	transmissive near8 modulator\$1	USPAT	OR	OFF	2006/08/09 20:33
S45	132	transmissive near modulator\$1	USPAT	OR	OFF	2006/08/09 20:34
S46	65	S45 and substrate	USPAT	OR	OFF	2006/08/09 20:34
S47	53	S46 and (pixel\$1 or circuit\$1)	USPAT	OR	OFF	2006/08/10 16:44
S48	19	S47 and (transparent near8 substrate)	USPAT	OR	OFF	2006/08/09 20:40
S49	288	Koichi and Kimura.in.	USPAT	OR	OFF	2006/08/10 16:53
S50	14	S49 and substrate and pixel\$1 and circuit	USPAT	OR	OFF	2006/08/10 16:53
S51	1	S49 and substrate and pixel\$1 and circuit\$1 and transmissive	USPAT	OR	OFF	2006/08/10 16:48
S52	121	Koichi and Kimura.in.	US-PGPUB	OR	OFF	2006/08/10 16:53
S55	15	S52 and substrate and pixel\$1 and circuit	US-PGPUB	OR	OFF	2006/08/10 16:54
S56	15	S52 and substrate and pixel\$1 and circuit\$1	US-PGPUB	OR	OFF	2006/08/10 17:41
S57	1	("6606135").PN.	USPAT	OR	OFF	2006/08/10 17:41
S58	7	("5161042"   "5521725"   "6339459"   "6351334"   "6359664"   "6474827"   "6513953").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/11 18:49
S59	253	349/95 and substrate and pixel\$1 and (driv\$4 or circuit\$4)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/11 18:50

## EAST Search History

S60	240	349/95 and substrate and pixel\$1 and (driv\$4 or circuit\$4)	USPAT	OR	OFF	2006/08/11 18:51
S61	61	349/95 and substrate and pixel\$1 and (driv\$4 or circuit\$4) and transmissive	USPAT	OR	OFF	2006/08/12 16:13
S62	51	sinclair.in. and microsoft	USPAT	OR	OFF	2006/08/11 20:54
S63	16	sinclair.in. and microsoft and substrate and (driv\$4 or circuit\$1)	USPAT	OR	OFF	2006/08/11 20:54